

is considered the most important segment of the American educational system, because largely upon them depends the interest and preparation of today's students who may be tomorrow's scientists, engineers, and technicians.

Arlington County, Va., is being used as a model for a pilot study on ways and means of improving the caliber of science and mathematics teaching in public schools. Other school systems in the Washington area have been invited to participate. School boards, parent-teachers associations, and civic groups are cooperating to raise a scholarship fund which will enable teachers to take graduate-level courses and familiarize themselves with both the fundamentals and recent developments in Sciences.

Another aspect of the plan provides qualified teachers with opportunities for summer employment in local scientific and engineering organizations in both industry and government.

On October 27, representatives of The George Washington University, University of Maryland, University of Virginia, American University, Georgetown University, Catholic University, Howard University, and District of Columbia Teachers' College met at the Academy-Research Council to develop a joint program of special

courses in mathematics, physics, chemistry, and biology for the summer of 1956. A committee on the improvement of science and mathematics teaching, composed of representatives of the participating universities, is being formed to help coordinate the plans for this cooperative effort.

Responsibility for the general supervision of the entire program will be assigned by the Academy-Research Council to a special board representing all areas of science, mathematics and engineering.

Shell Companies Foundation, Inc., has initiated a program of *Shell Merit Fellowships for High School Science and Mathematics Teachers*. Under the program, Shell will underwrite seminars for 60 teachers each summer. The study program will include graduate-level classes, lectures by outstanding scientists, and visits to research laboratories and industrial facilities. Cornell and Stanford Universities will operate the seminars.

Recipients of these fellowships will receive travel allowance, living expenses, tuition and fees, plus \$500 to compensate other potential summer earnings.

PALEONTOLOGY.—*New families of Gastropoda*. J. BROOKES KNIGHT, Smithsonian Institution.

The writer is senior author of a manuscript for those portions of Parts I and J of the *Treatise on invertebrate paleontology* that deal with the Monoplacophora and with the Paleozoic Gastropoda. The junior authors are Dr. Roger L. Batten and Dr. Ellis L. Yochelson. It was found that a not inconsiderable number of new taxa in the familial group were needed. Although exceptions have been made, it is thought that the *Treatise* is not an appropriate place for the publication of the names of new taxa. Likewise the authors feel that names published with more than two authors place an unnecessary burden on posterity and should be avoided if possible. If new names were published in the *Treatise* it would have been necessary to cite Knight, Batten, and Yochelson as authors, unless recourse was had to the always

clumsy and often confusing expedient of citing authorship for individual names of new taxa different from that of the paper as a whole.

These considerations have led the joint authors to agree that the senior author, Knight, publish the new taxa of most of the familial group in advance of the appearance of the *Treatise*. Since the full systematic treatment and full diagnoses of these taxa will appear within the year and since diagnoses are not requisite for validity of familial names, though recommended (Follett, 1955, p. 5 [38, 42]), they are omitted here.

Certain other names for new families, new genera, and new species will also be published separately in advance of the *Treatise* by the junior authors and by two others, Dr. Stephen S. Winters and Dr. Arthur J. Bou-

cot, both of whom have papers in preparation containing taxa important to the *Treatise*. In the following list names ending in -acea apply to superfamilies, in -idae to families, in -inae to subfamilies, and in -ides to tribes.

<i>Familial name</i>	<i>Type genus</i>
Agnesiinae	<i>Agnesia</i> Koninek, 1883.
Archinacellidae	<i>Archinacella</i> Ulrich and Scofield, 1897.
Coelozoninae } Coelozonides }	<i>Coelozone</i> Perner, 1907.
Elasmonematidae	<i>Elasmonema</i> Fischer, 1885.
Euphemitinae	<i>Euphemites</i> Warthin, 1930.
Gyronematinae	<i>Gyronema</i> Ulrich, 1897.
Hypseloconidae	<i>Hypseloconus</i> Berkey, 1898.
Liospirinae	<i>Liospira</i> Ulrich and Scofield, 1897.
Luciellidae	<i>Luciella</i> Koninek, 1883.
Meekospiridae	<i>Meekospira</i> Ulrich, 1897.
Knightitinae	<i>Knightites</i> Moore, 1941.
Neilsoninae	<i>Neilsonia</i> Thomas, 1940.
Ophiletinae	<i>Ophileta</i> Vanuxem, 1842.
Palaeotrochacea } Palaeotrochidae }	<i>Palaeotrochus</i> Hall, 1879.

<i>Familial name</i>	<i>Type genus</i>
Plagiellacea } Plagiellidae }	<i>Plagiella</i> Matthew, 1895.
Phanerotrematidae	<i>Phanerotrema</i> Fischer, 1885.
Plagiothyridae	<i>Plagiothyra</i> Whidborne, 1892.
Planitrochidae	<i>Planitrochus</i> Perner, 1903.
Planozonides	<i>Planozone</i> Perner, 1907.
Platyschismatinae	<i>Platyschisma</i> M'Coy, 1844.
Progalerinae	<i>Progalerus</i> Holzapfel, 1895.
Rhaphischismatidae	<i>Rhaphischisma</i> Knight, 1936.
Ruedemanniinae	<i>Ruedemannia</i> Foerste, 1914.
Tropidodiscinae	<i>Tropidodiscus</i> Meek and Worthen, 1866.
Tubinidae	<i>Tubina</i> Owen, 1859.
Turbonellinae	<i>Turbonellina</i> Koninek, 1881.

REFERENCE

- FOLLETT, W. I. *An unofficial interpretation of the International Rules of Zoological Nomenclature as amended by the XIII International Congress of Zoology, Paris 1948 and by the XIV International Congress of Zoology Copenhagen, 1953.* Society of Systematic Zoology, 1955.

PALEONTOLOGY.—*Some new pleurotomarian gastropods from the Permian of west Texas.* ROGER L. BATTEN, University of Wisconsin. (Communicated by John B. Reeside, Jr.)

Five new genera and two new families of upper Paleozoic gastropods have thus far been recognized by the writer during a study of Permian pleurotomarians from west Texas and New Mexico. The purpose of this present paper is to make available the resulting new names for the forthcoming *Treatise on invertebrate paleontology*, since no new names can be included in that work. The new genera and families will be treated and illustrated in greater detail in a paper to appear shortly.

PORTLOCKIELLIDAE Batten, n. fam.

Description.—Characterized by dominant, usually rather coarse spiral ornament and a selenizone low on the whorls; shell shape ranging from globose to turreted; ornament on parietal surface resorbed or covered by a very thin inductura.

Tapinotomaria Batten, n. gen.

Type species.—*Tapinotomaria rugosa* Batten, n. sp.

Description.—Turbiniform pleurotomarians with rounded to steplike whorls and dominant spiral ornament separated by concave interspaces; collabral ornament forms rounded to elongated

nodes at intersections with spiral ornament; selenizone defined by a thread with a spiral cord above this thread and commonly with a gap between the cord and the next cord above it; slit shallow.

Tapinotomaria rugosa Batten, n. sp.

Holotype.—U.S.N.M. no. 125281, U.S.N.M. Locality 702d, Leonard formation, Glass Mountains, Texas.

Description.—Whorl profile even and convex to selenizone; spiral and collabral ornament form nodes varying in degree of emphasis; 4 to 6 spiral cords above the selenizone and 4 to 14 spiral cords on the base.

PHYMATOPLEURIDAE Batten, n. fam.

Description.—Discoid to moderately high spired, highly ornamented pleurotomarians with a selenizone located at or slightly above the periphery; the outer whorl face vertical or sloping and may be narrow compared to upper whorl surface; selenizone convex to concave and usually strongly bordered; there may be basal sinuses; ornament in the parietal lip resorbed.